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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,093	02/07/2004	Shyam K Gupta		2092
34820	7590	09/12/2007		
SHYAM K. GUPTA BIODERM RESEARCH 5221 E. WINDROSE DRIVE SCOTTSDALE, AZ 85254				
			EXAMINER	
			BROOKS, KRISTIE LATRICE	
			ART UNIT	PAPER NUMBER
			1616	
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			09/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/708,093	GUPTA, SHYAM K	
	Examiner	Art Unit	
	Kristie L. Brooks	1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☒ Claim(s) 1-13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Application

1. Claims 1-13 are pending.

Claim Objections

2. Claims 6 and 11 are objected to because of the following informalities:
typographical error.

Claims 6 and 11 repeat the word "emollients". Appropriate correction is required.

3. Claims 1-13 are objected to because of the following informalities: non-compliance with text and font style. The text should be written in a nonscript font and preferably a font size of 12. See MPEP 608.01.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 4-6, and 10-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 4-5 and 10, the phrase "can be selected from, but not limited to" renders the claim indefinite because it does not definitively define the bounds of the

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claim and it is unclear as to what is intended by Applicant. Examiner suggests using proper Markush language in the claims. See MPEP 2173.05 (h).

Claims 6 and 11 include the phrase " (cationic, anionic, non-ionic, amphoteric, and zwitterionic)". It is unclear as to whether the matter cited within the parenthesis is included in the claimed subject matter.

Claim 4 recites "catechol and their chemical derivatives" as a group of tyrosinase substrate compositions that may be used within the compositions of the claimed invention. However, it is unclear as to whether the " chemical derivatives " are structural or functional derivatives and how much derivation is acceptable to maintain activity in the insecticide delivery system. As defined in Merriam-Webster's Collegiate® Dictionary (cited in 892 form), a derivative is a chemical substance related structurally to another substance and theoretically derivable from it, thus rendering " chemical derivatives " indefinite and unclear.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1 and 3-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Garlen et al. (US 4,707,354).

Garlen et al. teach sunscreen, protectant, moisturizing, dermatological compositions containing oxybenzone, ethyl 4-[bis(hydroxypropyl)]aminobenzoate,

padimate O and 2-phenylbenzimidazole-5-sulfonic acid, and skin protectants allantoin and dimethicone, in a cosmetically and therapeutically acceptable carrier and vehicle, containing suitable solvents moisturizers, humectants, oils, emusifiers, thickeners, thinners, surface active agents, fragrances, preservatives, antioxidants and the like (see the entire article, especially column 2 lines 40-51). The compositions may be provided in a form of a cream, emulsion, lotion, spray, ointment, mousse or foam mask (see the entire article, especially column 2 lines 67- column 3 lines 1-2). The following example illustrates compositions of the present invention in the form of a dermatological cream comprising:

Ingredient	Weight Percent
Oxybenzone	3
ethyl 4-[bis(hydroxypropyl)]aminobenzoate	2
padimate-O	7
2-phenylbenzimidazole-5-sulfonic acid	2
Allantoin	1
Dimethicone	1.25
Deionized water	44
Petroleum	5
Sodium lactate	5
Tyrosine	<1
Cysteine	<1
Cystine	<1

(see the entire article, especially the Example in column 3 lines 9-68 through column 4 lines 1-7 and claim 5).

8. Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Robinson et al. (US 5,603,923).

Robinson et al. teach artificial tanning compositions that provide improved color development and good chemical physical stability (see the entire article, especially the abstract). The composition comprises (a) from about 0.1% to 20% dihydroxyacetone, (b) from about 0.1 to about 10% of an amino acid such as cysteine, tyrosine, etc., or mixture thereof, and (d) a topical carrier (see the entire article, especially column 4 lines 13-25 and claim 1). The topical carrier can be in the form of an emulsion including, oil-in-water, water-in-oil, water-in-oil-in-water emulsions (see the entire article, especially column 9 lines 24-27). These emulsions can cover a broad range such as creamy lotions, and light and heavy creams (see the entire article, especially column 9 lines 28-32). The topical carrier preferably comprises from about 70% to about 99% in all embodiments of the invention (see the entire article, especially column 10 lines 9-11). The compositions of the present invention can also comprise additional components such as humectants, skin protectants, colorants, preservatives, surfactants, and pH adjusters for example (see the entire article, especially column 10 lines 55-67 through column 11 lines 1-5).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson et al. (US 5,603,923).

Applicant claims a topical skin darkening or skin tanning composition comprising: (i) at least one tyrosinase substrate composition for melanin synthesis boost, and (ii) at least one tyrosinase activator composition, and (iii) at least one skin surface coloring composition, and (iv) a cosmetically or pharmaceutically suitable carrier composition or delivery system.

Determination of the scope and content of the prior art

(MPEP 2141.01)

Robinson et al. teach artificial tanning compositions that provide improved color development and good chemical physical stability (see the entire article, especially the abstract). The composition comprises (a) from about 0.1% to 20% dihydroxyacetone, (b) from about 0.1 to about 10% of an amino acid such as cysteine, tyrosine, etc., or mixture thereof, and (d) a topical carrier (see the entire article, especially column 4 lines

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13-25 and claim 1). The topical carrier can be in the form of an emulsion including, oil-in-water, water-in-oil, water-in-oil-in-water emulsions (see the entire article, especially column 9 lines 24-27). These emulsions can cover a broad range such as creamy lotions, and light and heavy creams (see the entire article, especially column 9 lines 28-32). The topical carrier preferably comprises from about 70% to about 99% in all embodiments of the invention (see the entire article, especially column 10 lines 9-11). The compositions of the present invention can also comprise additional components such as humectants, skin protectants, colorants, preservatives, surfactants, and pH adjusters for example (see the entire article, especially column 10 lines 55-67 through column 11 lines 1-5).

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Robinson et al. do not teach an exemplified formulation of a topical skin darkening or skin tanning composition comprising: (i) at least one tyrosinase substrate composition for melanin synthesis boost, and (ii) at least one tyrosinase activator composition, and (iii) at least one skin surface coloring composition, and (iv) a cosmetically or pharmaceutically suitable carrier composition or delivery system.

Finding of prima facie obviousness

Rational and Motivation (MPEP 2142-2143)

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to make a topical skin darkening or skin tanning composition comprising: (i) at least one tyrosinase substrate composition for melanin synthesis boost, and (ii) at least one tyrosinase activator composition, and (iii) at least one skin surface coloring composition, and (iv) a cosmetically or pharmaceutically suitable carrier composition or delivery system.

One of ordinary skill in the art would have been motivated to do this because Robinson et al. suggests artificial tanning compositions comprising (a) from about 0.1% to 20% dihydroxyacetone, (b) from about 0.1 to about 10% of an amino acid such as cysteine, tyrosine, etc., or mixtures thereof, and (d) a topical carrier. The topical carrier can be in the form of an emulsion including, oil-in-water, water-in-oil, water-in-oil-in-water emulsions and are preferably present in the amount of 70% to about 99% in all embodiments of the invention. These emulsions can cover a broad range such as creamy lotions, and light and heavy creams. The compositions of the present invention can also comprise additional components such as humectants, skin protectants, colorants, preservatives, surfactants, and pH adjusters for example. Therefore, the claimed invention would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made because the prior art is fairly suggestive of the claimed invention.

Conclusion

11. No claims are allowed.


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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie L. Brooks whose telephone number is (571) 272-9072. The examiner can normally be reached on M-F 8:30am-6:00pm Est..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on (571) 272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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